

CLAIMS

The following claims replace all previous versions of the claims:

1. (Previously presented) A peptide comprising a compound having the general structural formula:



or pharmaceutically acceptable salts, or ethers, or amides thereof,

wherein X_1 is absent or comprises no less than 1 amino acid, and

X_2 is absent or comprises no less than 1 amino acid.

2. (Previously presented) The peptide of claim 1, comprising up to 30 amino acid residues.

3. (Currently amended) The peptide of claim 1, wherein X_1 is selected from the group consisting of 0 amino acid, His-Gly-Val-Ser-Gly- (SEQ ID NO 13), His-Gly-Gly-Gly- (SEQ ID NO 14), His-Val-Gly-Gly- (SEQ ID NO 15), His-Gly-Gly-Gly-Gly- (SEQ ID NO 16, and Gln-Gly-Gly-Gly-Gly- (SEQ ID NO 17) and His-Gly-Gly-Gly-.

4. (Currently amended) The peptide of claim 1, wherein X_2 is selected from the group consisting of 0 amino acid, -His-Gly-Thr-His-Gly- (SEQ ID NO 18), -Gly-Gly-Thr-His-Gly- (SEQ ID NO 19), -Pro-His-Val-Gly-Gly- (SEQ ID NO 20), -Pro-His-Gly-Gly-Gly- (SEQ ID NO 21), -Pro-His-Gly-Gly-Gly-Trp-Gly- (SEQ ID NO 22), -Gly-Gly-Gly-Thr-His-Ser (SEQ ID NO 23).

5. (Previously presented) The peptide of claim 1 selected from the group consisting of His-Gly-Val-Ser-Gly-Trp-Gly-Gln-His-Gly-Thr-His-Gly (SEQ ID NO 1), His-Gly-Gly-Gly-Trp-Gly-Gln-Pro-His-Gly-Gly-Gly (SEQ NO 2), His-Gly-Gly-Gly-Gly-Trp-Gly-Gln-Gly-Gly-Thr-His-Gly (SEQ ID NO 3), His-Gly-Gly-Gly-Trp-Gly-Gln-Pro-His-Val-Gly-Gly (SEQ ID NO 4), His-Val-Gly-Gly-Trp-Gly-Gln-Pro-His-Gly-Gly-Gly (SEQ NO 5), Gln-Gly-Gly-Gly-Gly-Trp-Gly-Gln-Pro-His-Gly-Gly-Gly-Trp-Gly (SEQ ID NO 9), His-Gly-

Gly-Gly-Trp-Gly-Gln-Pro-His-Gly-Gly-Gly-Trp-Gly (SEQ ID NO 10), and His-Gly-Gly-Gly-Trp-Gly-Gln-His-Gly-Gly-Gly-Trp-Gly (SEQ ID NO 11).

6. (Previously presented) A protein comprising the aminoacid sequences of claim 1.

7. (Previously presented) The peptide of claim 1, having antiproliferative and cytotoxic activity.

8. (Previously presented) The peptide of claim 1, having antitumoral activity.

9. (Previously presented) The peptide of claim 1, having antiviral activity.

10. (Previously presented) The peptide of claim 1, having immunomodulating activity.

11. (Previously presented) The protein of claim 6, having antitumoral activity.

12. (Previously presented) The protein of claim 6, having antiviral activity.

13. (Previously presented) The protein of claim 6, having immunomodulatory activity.

14. (Previously presented) A chemical compound having anti-proliferative, cytotoxic, antitumoral or antiviral activity, comprising the aminoacid sequence as defined in claim 1, wherein the chemical compound is not a natural peptide or protein.

15. (Previously presented) A pharmaceutical composition comprising the peptide of claim 1.

16. (Previously presented) A pharmaceutical composition comprising the protein of claim 6.

17. (Previously presented) A pharmaceutical composition comprising the chemical compounds of claim 14.

18. (Original) A nucleotide sequence coding any one of the peptides of claim 1.

19. (Previously presented) A vector suitable for the expression of the peptides of claim 1 in a host cell which expresses said peptide after transformation.

20. (Previously presented) A host cell transformed by the vector of claim 19.

21. (Previously presented) The peptide of claim 1, comprising 5 to 15 aminoacid residues.

22. (Previously presented) A polypeptide comprising the aminoacid sequence of claim 1.

23. (Previously presented) The polypeptide of claim 22, having antitumoral activity.

24. (Previously presented) The polypeptide of claim 22, having antiviral activity.

25. (Previously presented) The polypeptide of claim 22, having immunomodulatory activity.

26. (Previously presented) A pharmaceutical composition comprising the polypeptide of claim 22.